

REMARKS

The Examiner has made a restriction requirement under 35 U.S.C. to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Specifically, the Examiner requires election between either a (1) fibrous or a (2) liquid binder material. Upon allowance of the generic claim, Applicant is entitled to consideration of claims to the additional nonelected species.

As stated in paragraph seven of the Office Action, on August 10, 2005 the undersigned did provisionally elect with traverse to prosecute the invention of claims 10-17, and 23-28 wherein a fibrous binder material is required. Applicant affirms this election here.

This Amendment and Response to Non-Final Office Action is being submitted in response to the Office Action mailed September 12, 2005. Claims 1-32 are pending in the Application. Claims 10-14, 16-17, and 25-26 are objected. Claims 1-28 stand rejected. Specifically, Claims 1-17 stand rejected under 35 U.S.C. 112, first paragraph, as nonenabling. Claims 1-17 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1-5, 7, 12, 15, 18-20, 22-24 stand rejected under 35 U.S.C. 102(a) as being anticipated by JP 2002348776 (hereafter JP '766). Claims 1-10, 12, and 15 stand rejected under 35 U.S.C. 102(e) as being anticipated by US Publication No. 2004/0028958 to Assink et al. (Assink '958). Claims 11, 13-14, and 16-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2004/0028958 to Assink et al. (Assink '958). Finally, claims 18-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2004/0028958 to Assink et al. (Assink '958) in view of US Patent No. 6,297,178 issued to Berbner et al. (Berbner '178).

In response to these objections and rejections, Claims 1, 4, 5, 10-14, and 16-17 have been amended to further clarify the subject matter of the present invention. These amendments are fully supported in the specification, drawings, and claims of the

Application and no new matter has been added. Claims 18-28 have been cancelled. Based upon the amendments, reconsideration of the Application is respectfully requested in light of the following remarks.

Claim Objections

The Examiner has objected to several claims based on informalities. As explained below, the Examiner is mistaken as to his assertion that all of the fibers are coated. However, in the interest of advancing prosecution of the application, the following changes have been entered according to the Examiner's suggestions:

Claim 10 has been amended to read, "...said FR resin coated natural fiber...."

Claim 11 has been amended to read, "...said FR resin coated cotton...."

Claim 12 has been amended to read, "...said FR resin coated synthetic fiber...."

Claim 13 has been amended to read, "...said FR resin coated rayon...."

Claim 14 has been amended to read, "...said FR resin coated rayon...."

Claim 16 has been amended to read, "...said FR resin coated rayon...."

Claim 17 has been amended to read, "...said FR resin coated rayon...."

Claims 25, 26, and 28 have been cancelled.

Additionally, the following claims have been amended to further clarify the invention:

Claim 4 has been amended to read, "...said uncoated synthetic fiber...."

Claim 5 has been amended to read, "...said uncoated synthetic fiber...."

Rejection of Claims 1-17 under 35 U.S.C. 112, First Paragraph:

Claims 1-17 stand rejected under 35 U.S.C. 112, first paragraph, as being nonenabling for the scope of the term "uncoated" in the claims.

First, pages 1 and 4 of the specification use the term “uncoated.” Its plain meaning can be found in any dictionary. Because fibers are “uncoated,” there are no enabling acts to perform – contrary to the Examiner’s position. Uncoated fibers are simply that – uncoated.

Applicant points the Examiner’s attention to page 6, lines 1-9. There the Applicant states that the FR resin “may be applied to *specific* fibers....”¹ The Applicant states that the FR resin “can be applied to natural or synthetic fibers before they are dry laid onto a conveyor.”² The Applicant goes on to state that “[I]t is also within the scope of the present invention to purchase the fiber already coated with the desired FR resin coating, and merely blend them into the non-woven fabric.”³ One skilled in the art would recognize that it is only these fibers that are coated, not the entire web.

The Examiner assumes that every fiber of the Applicant’s disclosed web is coated. This is simply not the case. Fibers that are FR coated would remain coated, however, the Examiner’s view of binder material is simply inaccurate.

“The low melt binder melts or liquefies at a temperature lower than the remaining components of the nonwoven article, and preferably at least 5° F lower than any remaining component in the nonwoven.”⁴ When heated to its melting point, low melt binder will collect at the intersection points of other high melt fibers of the nonwoven web. The low melt binder accumulates at these points, such that substantially only the intersection points of the high melt fibers are “coated” by the low melt binder. Thus, when the web is cooled, the low melt binder coalesces around the fiber intersection points, adhering the fibers together at that point. Therefore, after cooling, the low melt binder is substantially localized at these intersection points, and does not “coat” the fibers as suggested by the Examiner. Furthermore, neither is the FR resin coating applied to

¹ Application as filed, page 6, lines 1-2.

² Id at page 6, lines 4-5.

³ Id at page 6, lines 5-7.

⁴ Id at page 7, lines 9-12.

every fiber in the web, nor does it melt during the heat treatment of the binder fiber. As stated in the claims, the “uncoated” fibers are simply that: uncoated.

In light of the comments presented herein, Applicant submits that the current rejection has been traversed. Applicant respectfully requests its immediate withdrawal.

Rejection of Claims 1-17 under 35 U.S.C. 112, Second Paragraph:

Claims 1-17 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner states that it is unclear what Applicant intends as encompassed by “uncoated” fibers.

As explained above uncoated fibers are just that: uncoated by FR resin. All of the comments presented there apply with equal force to the current rejection. In light of the comments presented in response to the Examiner’s 112, first paragraph, rejection, Applicant submits that the current rejection has also been traversed. Applicant respectfully requests its immediate withdrawal.

Rejection of Claims 1-5, 7, 12, 15, 18-20, and 22-24

Under 35 U.S.C. 102(a) – JP ‘766:

Claims 1-5, 7, 12, and 15 stand rejected under 102(a) as being anticipated by JP 2002348766 (hereafter JP ‘766). Claims 18-20 and 22-24 have been cancelled.

As acknowledged by the Examiner, JP '766 does not teach the limitations of claims 8 or 9. The Applicant has added the limitation of claim 8 into independent claim 1, and has cancelled dependent claim 8. Applicant therefore submits that JP '766 can no longer anticipate the Applicant's invention. Withdrawal of the current rejection is respectfully requested with respect to claims 1-5, 7, 12, and 15.

Rejection of Claims 1-10, 12, and 15 Under 35 U.S.C. 102(e) – Assink '958:

Claims 1-10, 12, and 15 stand rejected under 35 U.S.C. 102(e) as being anticipated by US Publication No. 2004/0028958 to Assink et al. (Assink '958).

Assink '958 discloses from about 15 to about 85% of a fire-retardant cellulose component dispersed throughout a fibrous body. As stated therein, the cellulose component is preferably a recycled newspaper material that has been treated with boric acid or sodium polyborate to render it substantially nonflammable.⁵ Treating a cellulose material with boric acid or sodium polyborate is not the same thing as coating fibers with an FR resin material. Moreover, boric acid and sodium polyborate are not resins.

Treating cellulose with boric acid or sodium polyborate is an aqueous based process. Boric acid or sodium polyborate is dissolved into an aqueous solution. Cellulosic material is then saturated with the solution, either by submersion or spraying, to achieve a substantial impregnation of the cellulose with the boric acid or sodium polyborate. Water is then evaporated, leaving the treated cellulose material.

Claim 1 calls for either or both of a synthetic or natural fiber "coated with an FR resin material." As stated above, the boric acid or sodium polyborate treatment process of Assink '958 simply does not disclose an FR resin coated fiber. Moreover, the Examiner assumes that the boric acid or sodium polyborate are compatible with the fibers. There is no disclosure in Assink '958 that they dissolve certain fibers. There are

⁵ US 2004/0028958 Paragraph 21.

no experiments to demonstrate this point. Because each of the rejected claims depends from claim 1, Applicant respectfully submits that this rejection has therefore been traversed, and its immediate withdrawal is respectfully requested.

For the above reasons, Applicant submits that the rejection of dependent Claims 16 and 17 under 35 U.S.C. 103(a) has been overcome and is now improper and respectfully requests that the rejection be withdrawn.

Rejection of Claims 11, 13-14, and 16-17 Under 35 U.S.C. 103(a) – Assink ‘958.:

Claims 11, 13-14, and 16-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2004/0028958 to Assink et al. (Assink ‘958).

The comments presented above are equally applicable with respect to the current rejection. Claim 1 calls for either or both of a synthetic or natural fiber “coated with an FR resin material.” As stated above, the boric acid or sodium polyborate treatment process of Assink ‘958 simply does not disclose an FR resin coated fiber. Because each of the rejected claims depends from claim 1, Applicant respectfully submits that this rejection has therefore been traversed, and its immediate withdrawal is respectfully requested.

***Rejection of Claims 18-28 Under 35 U.S.C. 103(a) –
Assink ‘958. in view of Berbner ‘178:***

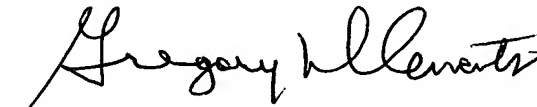
Claims 18-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication No. 2004/0028958 to Assink et al. (Assink ‘958) in view of US Patent No. 6297178 issued to Berbner et al. (Berbner ‘178).

Claims 18-28 have been cancelled. Withdrawal of this rejection is therefore respectfully requested.

CONCLUSION

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in better form for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,



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